

REMARKS

Claims 3 and 13 are canceled without prejudice or disclaimer. Claims 5-12, 14, 16-18, 22-28 and 31-38 were previously canceled. Claims 40-48 are withdrawn from consideration.

Claims 1 and 4 are amended. Claim 1 incorporates the limitations found in claims 3 and 13. Claim 4 is amended to address the indefiniteness rejection, as discussed below.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. The Rejection of Claims 1-4 under 35 U.S.C. 112

Claims 1-4 are rejected under 35 U.S.C. 112, as indefinite.

The Office states that claim 1 is indefinite on the basis that limitation "the complete gene of interest" lacks proper antecedent basis. Claim 1 is amended to specify that it refers to the "complete sequence of the gene of interest."

Claim 4 is rejected on the basis that there is insufficient antecedent basis for the term "cDNA." Claim 4 has been amended to delete the first occurrence of the term "cDNA" and to insert in its place the term "genomic DNA library."

Claim 4 is rejected on the basis that it is not clear what is meant by "normalized." The term "normalized" is well understood in the art to refer to a process of producing representative gene libraries, as described in the specification at page 17, lines 22-26. Examples of "normalization" processes include the processes described in U.S. Patent No. 5,763,239, WO 95/08647 and WO 95/11986.

For the foregoing reasons, Applicants submit that the claims overcome the rejections under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

II. The Rejection of Claims 1-4, 13, 15, 21, 29 and 30 under 35 U.S.C. 102(b)

Claims 1-4, 13, 15, 21, 29 and 30 are rejected under 35 U.S.C. 102(b) as anticipated by WO 98/22491 (McCarthy et al.). This rejection is respectfully traversed.

McCarthy et al. do not teach or even suggest a method for identifying and isolating a gene of interest from a gene library by inserting into the library a DNA fragment comprising a transposon and a promoterless and secretion signal-less polynucleotide encoding a secretion reporter and wherein the insertion is by in vitro transposition.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 102. Applicants respectfully request reconsideration and withdrawal of the rejection.

III. The Rejection of Claims 1-4, 19-21, 29-30 and 39 under 35 U.S.C. 102(b)

Claims 1-4, 19-21, 29-30 and 39 are rejected under 35 U.S.C. 102(b) as anticipated by WO 97/40146 (Jacobs et al.). This rejection is respectfully traversed.

Jacobs et al. do not teach or even suggest a method for identifying and isolating a gene of interest from a gene library by inserting into the library a DNA fragment comprising a transposon and a promoterless and secretion signal-less polynucleotide encoding a secretion reporter and wherein the insertion is by in vitro transposition.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 102. Applicants respectfully request reconsideration and withdrawal of the rejection.

IV. The Rejection of Claims 1-4, 15, 19, 21, 29-30 and 39 under 35 U.S.C. 102(e)

Claims 1-4, 15, 19, 21, 29-30 and 39 are rejected under 35 U.S.C. 102(e) as anticipated by U.S. Patent No. 6,150,098 (Zhang et al.). This rejection is respectfully traversed.

Zhang et al. do not teach or even suggest a method for identifying and isolating a gene of interest from a gene library by inserting into the library a DNA fragment comprising a transposon and a promoterless and secretion signal-less polynucleotide encoding a secretion reporter and wherein the insertion is by in vitro transposition.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 102. Applicants respectfully request reconsideration and withdrawal of the rejection.

V. The Rejection of Claims 1-4, 13, 15, 19-21, 29-30 and 39 under 35 U.S.C. 103(a)

Claims 1-4, 13, 15, 19-21, 29-30 and 39 are rejected under 35 U.S.C. 103(a) as obvious over Zhang et al. or Jacobs et al. or McCarthy et al. in view of U.S. Patent No. 6,468,739 (Haas et al.). The Examiner alleges that one skilled in the art would be motivated to use transposons in the methods of Zhang et al. or Jacobs et al. or McCarthy et al. because Haas et al. teach a method of identifying an adhesion gene using insertion of the genes into a transposon carrying a beta-lactamase report, and Zhang et al., Jacobs et al. or McCarthy et al. teach method of identifying secretary genes using a promoterless and secretion signal-less sequence polynucleotide encoding a secretion reporter. This rejection is respectfully traversed.

As discussed above, and as acknowledge by the Examiner, Zhang et al. or Jacobs et al.

or McCarthy et al. do not disclose a method for identifying and isolating a gene of interest from a gene library by inserting into the library a DNA fragment comprising a transposon and a promoterless and secretion signal-less polynucleotide encoding a secretion reporter. Furthermore, Zhang et al. or Jacobs et al. or McCarthy et al. also do not disclose insertion of DNA fragment into the library by in vitro transposition.

Zhang et al. or Jacobs et al. or McCarthy et al. in combination with Haas et al. also do not collectively suggest a method for identifying and isolating a gene of interest from a gene library by inserting into the library a DNA fragment comprising a transposon and a promoterless and secretion signal-less polynucleotide encoding a secretion reporter and wherein the insertion is by in vitro transposition. In particular, Haas et al. clearly does not motivate an artisan to modify the methods of Zhang et al. or Jacobs et al. or McCarthy et al. to use *in vitro* transposition as Haas et al. discloses the use of very different in vivo transposition (recombination) techniques. Thus, based on Haas et al., one skilled in the art would not be motivated to employ *in vitro* transposition techniques in Zhang et al. or Jacobs et al. or McCarthy et al. as there is no suggestion in any of the cited references to use *in vitro* transposition techniques in a method for identifying and isolating a gene of interest from a gene library, wherein the gene encodes a polypeptide carrying a signal sequence for secretion, and the method includes the step of inserting into a library a DNA fragment comprising a transposon and a promoterless and secretion signal-less polynucleotide encoding a secretion reporter.

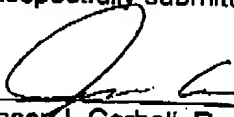
For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

VI. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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